

- 7 -

Remarks

The Examiner objected to the specification due to certain informalities on page 6, paragraph 17. Amendment to the specification has been made as requested by the Examiner.

The Examiner objected to claim 4 due to insufficient antecedent basis. Claim 4 has not been amended to depend from newly amended claim 1 which does provide proper antecedent basis.

The Examiner objected to claim 9 due to the confusion and redundancy of line 15. Claim 9 has been amended to delete line 15.

The Examiner objected to form of claim 11 due to lack of clarity and insufficient antecedent basis. The preamble of the claim 11 has been rewritten as suggested by the Examiner to solve the clarity issue. Additionally, the term "sense elements" has been used consistently in the claim changing the "sense bridge elements" in line 3.

The Examiner rejected claims 1, 2, 8, 11 and 12, under 35 U.S.C. 102 (b), as being anticipated by U.S. Patent No. 6,433,544 to Kawate et al. Applicants respectfully request that this rejection be withdrawn for the reasons set forth below.

Claim 1 has been amended to contain the subject matter of dependent claim 2; and additionally, the general subject matter of claim 3 including "at least one multiplexer with addressable ports connected to the outputs of each half bridge of the plurality of sense elements, the at least one multiplexer having an output port connected to at least one signal condition path".

Applicants acknowledge with appreciation the mention by the Examiner that claim 1, written in independent form including all the limitations of the base claim, and any intervening claim, would be allowable, and respectfully request and maintain that

- 8 -

the present amended claim would also be allowable. Amended claim 1 is clearly not anticipated by the Kawate et al. reference.

Claims 4-8 all depend from independent claim 1; and accordingly, would also be in condition for allowance.

Independent claim 9 and dependent claim 10 have been amended to overcome the objection by the Examiner; and as stated in the Office Action, should be now in condition for allowance.

Claim 11 has been amended to include, inter alia, the addition of "providing at least one multiplexer with addressable ports connected to the outputs of each half bridge of the plurality of sense elements". Clearly this feature is not anticipated by the Kawate et al. reference. Accordingly, it is believed that claim 11, as now presented, is in condition for allowance.

Dependent claims 13-17 all depend from claim 11; and accordingly, should be in condition for allowance.

Additionally, it is noted that the Examiner indicated that claims 13-17 contained allowable subject matter.

Claims 2, 3 and 12 have been cancelled without prejudice.

In summary, Applicants' claimed invention provides for a novel patentable variable condition responsive sensor system and method. The present claims 1, 4-11 and 13-17, as now amended, clearly distinguish over the cited art and are not anticipated by it.

- 9 -

For the above reasons, reconsideration by the Examiner, allowance of the claims as now presented and passing of the case to issuance are respectfully solicited.

Respectfully submitted,



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MAILING CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 today.


Russell E. Baumann

6/2/05
Date